

CLAIMS

1. A method for introducing a mutation into a nucleotide sequence of a target nucleic acid, the method
5 comprising the steps of:

(1) preparing a DNA having an inverted repeat sequence, wherein the nucleotide sequence of the DNA having an inverted repeat sequence is homologous to a target nucleic acid and contains a mutation to be introduced into
10 the target nucleic acid; and

(2) transferring the DNA having an inverted repeat sequence into a cell.

2. The method according to claim 1, wherein the DNA having an inverted repeat sequence has a binding motif
15 sequence for a protein having a nuclear transport signal.

3. The method according to claim 2, wherein the binding motif sequence for a protein having a nuclear transport signal is a binding motif sequence for a transcription factor.

20 4. The method according to claim 1, wherein the DNA having an inverted repeat sequence has a modified nucleotide.

5. The method according to claim 1, wherein the DNA having an inverted repeat sequence is a double-stranded
25 DNA.

6. The method according to claim 1, wherein the DNA having an inverted repeat sequence is a single-stranded DNA.

7. The method according to claim 1, wherein the
5 target nucleic acid is a nucleic acid located in cytoplasm.

8. The method according to claim 1, wherein the target nucleic acid is a nucleic acid located in nucleus.

9. The method according to claim 1, wherein a
10 plurality of mutations are simultaneously introduced into the target nucleic acid.

10. The method according to claim 1, wherein the mutation to be introduced into the target nucleic acid is substitution, deletion and/or insertion of a nucleotide.

11. A kit for introducing a mutation into a
15 target nucleic acid by the method defined by claim 1, the kit containing a DNA having an inverted repeat sequence, wherein the nucleotide sequence of the DNA having an inverted repeat sequence is homologous to a target nucleic acid and contains a mutation to be introduced into the
20 target nucleic acid.

12. The kit according to claim 11, wherein the DNA having an inverted repeat sequence has a binding motif sequence for a protein having a nuclear transport signal.

13. The kit according to claim 12, wherein the
25 binding motif sequence for a protein having a nuclear

transport signal is a binding motif sequence for a transcription factor.

14. The kit according to claim 11, wherein the DNA having an inverted repeat sequence has a modified
5 nucleotide.

15. The kit according to claim 11, wherein the DNA having an inverted repeat sequence is a double-stranded DNA.

16. The kit according to claim 11, wherein the
10 DNA having an inverted repeat sequence is a single-stranded DNA.